Opportunities and Challenges in Cross-Border REC Transactions

GP Marketing Conference Austin
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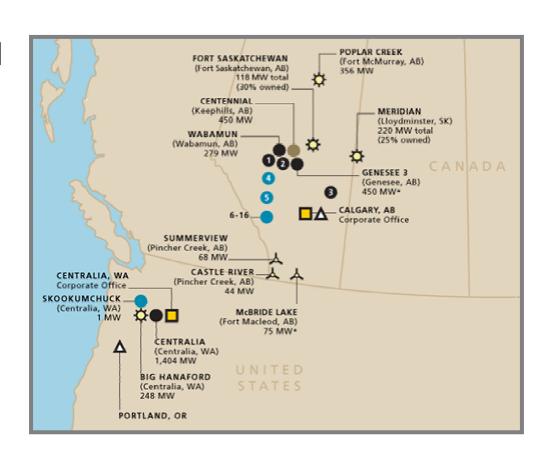
Outline

- Vision Quest Background
- Certification Overview
 - Issues
- Verification and Attestations
 - Issues
- Environmental Attributes
 - Government Legislation Issues
- Cross Border Market Opportunities
- Market Challenges



Vision Quest, TransAlta's Wind Business

- Canada's largest wind power producer
- 3 major wind farms:
- Castle River 44 MW
- McBride 75 MW
- Summerview 68 MW
- 189 MW Own and Operate
- Product Marketing
 - Green Energy
 - Green Tags





Certification

- Levels of complexity
- For Canadian produced RECs to be Green-e certified they must:
 - First be certified as a REC within Canada
 - To be certified as a REC within Canada a renewable generating facility must be certified
 - Facility → Canadian REC → Green-e









Certification Issues

- Initially Green-e certification was limited to sales from Canada to the United States and not within
 - What about purchases that end up back in Canada?
- 2. Costs (3 audits = \$\$\$)
- 3. Cross-border certification is critical



Verification and Attestations

- Attestation language:
- I declare that 1) all the renewable attributes, including any emissions reduction credits or emissions allowances, represented by the renewable electricity generation listed below were transferred...the electrical energy that was generated with the attributes was not separately sold, marketed or otherwise represented as renewable energy and was not used to meet any federal, state or local renewable energy requirement, renewable energy procurement, renewable portfolio standard, or other renewable energy mandate/target.



Attestation Issues

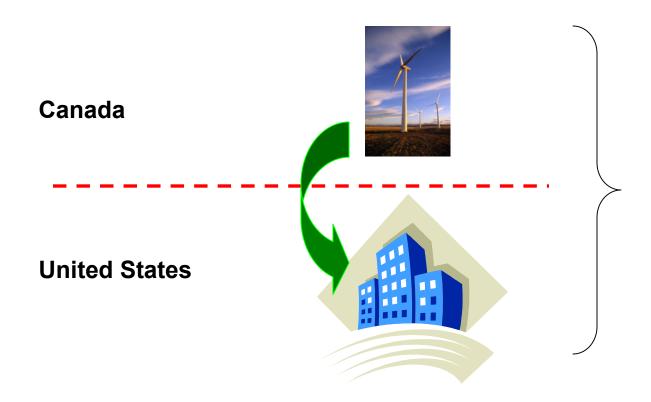
- 1. The province/state will set a goal/target for increasing the renewable energy portion to X %
 - Voluntary
 - No incentives or benefits to reach target
- 2. Emission Reductions and the impact of varying state/provincial/federal legislation



Environmental Attributes/ Government Legislation

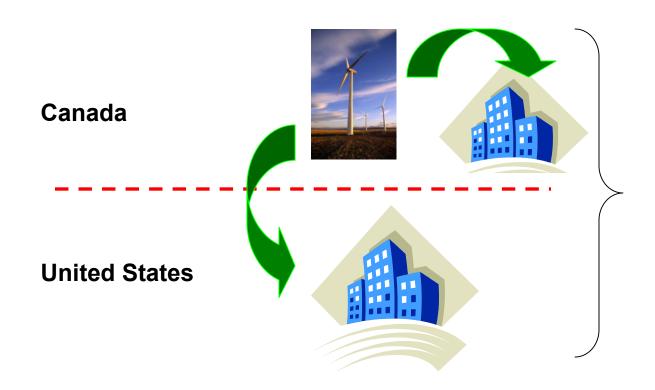
- Differences by:
 - State/Provincial
 - Regional
 - Federal
- NOx, SO2, CO2
- Kyoto





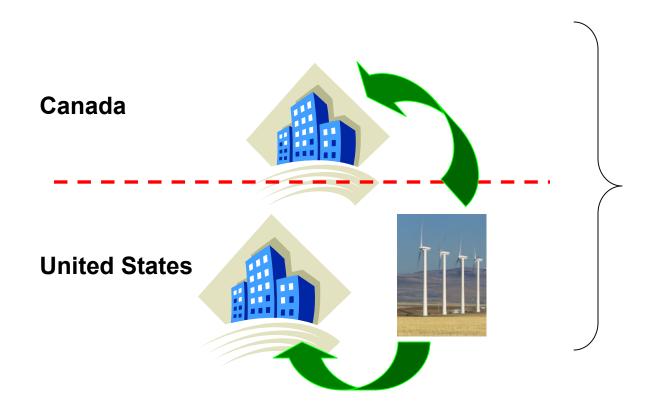
Canadian REC producer sells to end-customer in the US





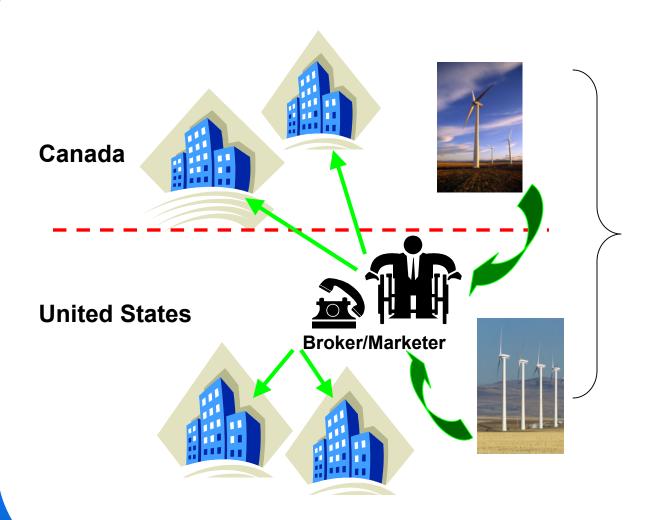
Canadian REC producer sells to multi-national





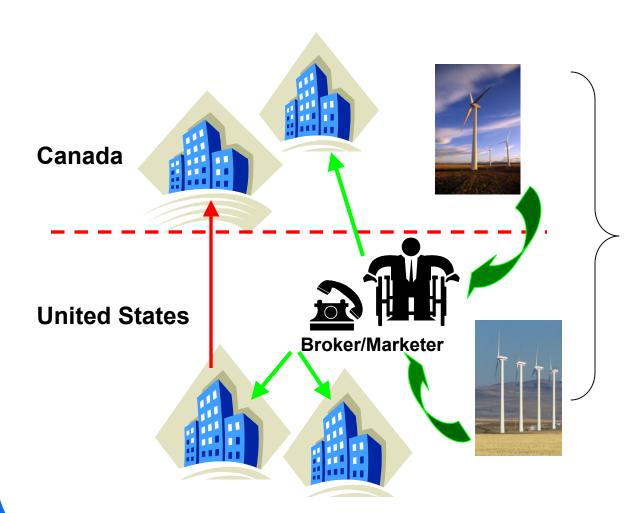
Reverse: US
REC producer
sells to multinational or
Canada only





Add broker/marketer





Internal Transfer within end-user (multi-national)



Market Challenges/Opportunities

- Challenge: Customer understanding of cross-border transfers is low
- Opportunity:
 - Link with flow of electricity (promote within interconnected grid)
 - Focus on multi-national organizations
 - Bundle REC products from various regions
 - Additionality for existing buyers



Conclusion

- Significant opportunities exist for crossborder transactions
- Inter-connectivity of grids is high, customers are very similar
- Still some bugs to work out



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